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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/661,663 | 09/14/2000 | Erwin Spanner | 56/344 | 9189 |

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GENERAL NUMBER 00757
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| EXAMINER |
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SHAH, KAMINI S

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| ART UNIT | PAPER NUMBER |
| 2863 | |

DATE MAILED: 03/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/661,663

Applicant(s)

SPANNER, ERWIN

Examiner

Kamini S Shah

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on RCE request and IDS filed on 12/15/03.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 10, 11, 13, 14 and 17 is/are allowed.
- 6) ☒ Claim(s) 1, 2, 4, 5 and 7-9 is/are rejected.
- 7) ☒ Claim(s) 3, 6 and 12-15 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 12/15/03.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

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Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 12/15/03 has been entered.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-2, 4-5, 7-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over 5,061,073 ('073) in view of 4,587,622 ('622).

('073) discloses the device for position indication and detection of guidance errors having scale including position measuring graduation arranged in position measurement direction **such as the scanning arrangement for graduation carrier 1, col. 2, lines 41-46 and col. 3, lines 23-25**; a first guidance error measuring device is arranged perpendicularly with respect to the position measurement graduation, **such as scanning fields A2 and reference mark scanning fields ARI and ARII**; and second guidance error measuring graduation, **such as surrounding field graduation 3 extends along each side of the measuring graduation 2 and runs perpendicular to**



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the grid lines of the measuring graduation see col. 2, lines 49-55; position indication scanning unit movable with respect scale, such as the graduation carrier 1 carries a measuring graduation 2, see col. 2, lines 44-46.

('073) teaches as disclosed the scanning fields for measuring graduation, however does not teach guidance error scanning unit scanning error measuring graduation for generating error measurement signals. ('622) discloses **guidance dependent positional errors of a measurement machine by moving the measurement probe of the machine along position standard which extends over substantially the entire measurement range and outputs signals of the signals of the coordinate measurement devices, see col. 2, lines 35-48 and col. 3, lines 15-25.** It would have been obvious to one of the ordinary skill in the art at the time of invention to utilize the teaching of ('622) for generating signals such position measurement and guidance error measurement into the measuring graduation marking device of (073) for the higher operating reliability.

Regarding claim 2, ('073) discloses graduation carrier having graduation period of 8microns.

Regarding claims 4-5, ('622) discloses position measuring graduation and guidance error measuring graduation arranged on the common support element such as measuring devices are mounted to the part which is displaceable along the involved guide, see col. 3, lines 15-22.

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Regarding to claims 7-9, to recited various properties of the position indication and guidance error scanning unit, they are known to the person skilled in the art for scanning device as can seen in either prior arts.

Allowable Subject Matter

4. Claims 3, 6, 12, 15, and 18 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The cited prior art does not teach first and second guidance error measuring graduation having a graduation period identical to the position measuring graduation and extended over tan entire measurement distance (claim 3); and position scanning unit and first guidance error scanning unit are identical (claim 6); and guidance error scanning unit's arrangement (claim 12).

5. The indicated allowability of claims 1-2, 4-5, 7-9 is withdrawn in view of the newly discovered reference(s) to 5,061,073 and 4,587,622. Rejection based on the newly cited reference(s) is as above.


6. Claims 10, 11, 13-14,16 and 17 are allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kamini S Shah whose telephone number is 571-272-2279. The examiner can normally be reached on IFP.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Barlow can be reached on 571-272-2269. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Kamini S Shah
Primary Examiner
Art Unit 2863

kss